

PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE INSTALLATION OF A NEW CONTROLLER WITH TRAFFIC SIGNALS, INCLUDING VIDEO TRAFFIC DETECTION FOR THIS PHASE OF MAINTENANCE OF WORK AT THE INTERSECTION OF MD 450 AT TRINITY/MOYLAN DRIVE IN PRINCE GEORGE'S COUNTY. MD 450 IS ASSUMED TO RUN IN AN EAST/WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA-TWO-PHASE, FULLY ACTUATED MODE.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, SOLID STATE EIGHT PHASE CONTROLLER WITH SYSTEM PACKAGE, VIDEO RACK, TELEMETRY MODULE, ISOLATION BOARD AND SPECIAL RELAY, HOUSED IN NEMA SIZE '6' BASE MOUNTED CABINET.

SPECIAL NOTE

ALL UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC AND ARE NOT TO BE CONSIDERED COMPLETE BECAUSE THESE UTILITIES MAY BE MODIFIED PRIOR TO AND DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL EQUIPMENT WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

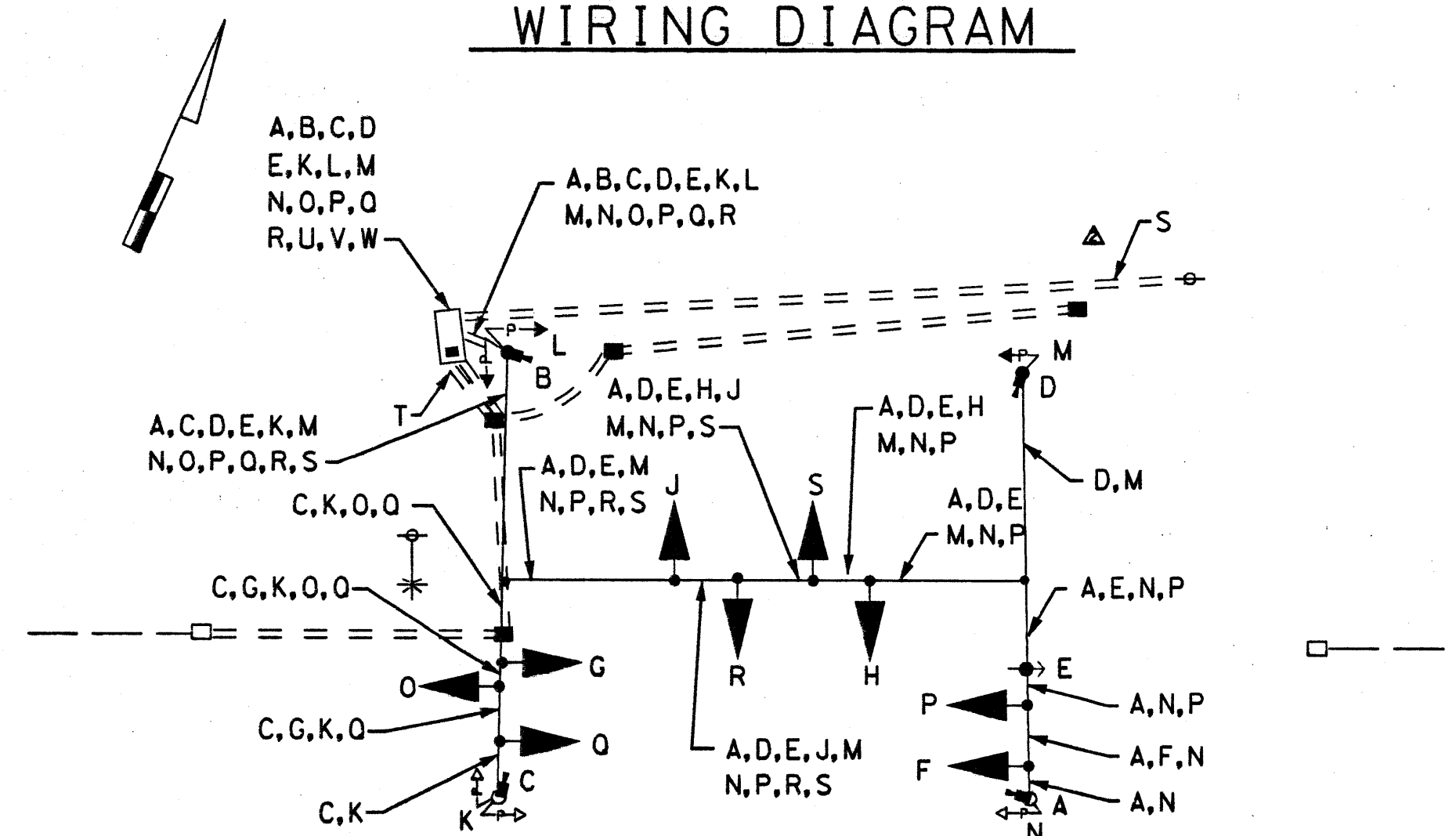
CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
971017	816	1 EA.	EIGHT PHASE, FULL TRAFFIC ACTUATED SOLID STATE DIGITAL CONTROLLER WITH SYSTEM PACKAGE, HOUSED IN A NEMA SIZE '6' BASE MOUNTED CABINET
973023	813	32 S.F.	SHEET ALUMINUM SIGN TO CONSIST OF: -4 EA. D3-2 (16 IN. X VAR.)-SPAN MOUNT
900000	807	1 EA.	OPTICOM DISCRIMINATOR MODULE

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR

CAT CODE NUMBER	SPEC. SECTION	QUANTITY	DESCRIPTION
203030	205	1 C.Y.	TEST PIT EXCAVATION
585620	556	150 L.F.	12 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING
585624	556	80 L.F.	24 IN. HEAT APPLIED THERMOPLASTIC WHITE PAVEMENT MARKING
801004	801	2 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
802501	805	55 L.F.	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
810010	810	45 L.F.	ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 AWG)
811001	811	3 EA.	ELECTRICAL HANDHOLE
813015	813	32 S.F.	INSTALL OVERHEAD SIGN
833062	805	40 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-RISER
837001	804	1 EA.	GROUND ROD 3/4 IN. X 10 FT. LENGTH
838003	807	1 EA.	CONTROL AND DISTRIBUTION EQUIPMENT (120/240V 1 PHASE, 3 WIRE SYSTEM)
860272	814	24 EA.	12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
860278	814	6 EA.	12 IN. PEDESTRIAN SIGNAL HEAD SECTION
861107	810	705 L.F.	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)
861108	810	1160 L.F.	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)
869101	819	400 L.F.	1/4 IN. STEEL TETHER WIRE
869102	819	400 L.F.	3/8 IN. STEEL SPAN WIRE
870166	805	216 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-BORED
870167	805	61 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-TRENCHED
870168	805	144 L.F.	4 IN. SCHEDULE 80 RIGID PVC ELECTRICAL CONDUIT-SLOTTED
871117	816	1 EA.	INSTALL CONTROLLER AND CABINET - BASE MOUNT
800000	805	1 EA.	VIDEO TRAFFIC DETECTION SYSTEM
800000	805	4 EA.	VIDEO DETECTOR 500 FT. CABLE
800000	807	1 EA.	OPTICOM DETECTOR EYE
800000	810	270 L.F.	ELECTRICAL CABLE 4-CONDUCTOR (NO. 20 AWG)
800000	818	2 EA.	40 FT. CLASS II WOOD STRAIN POLE WITH TWO BACK GUYS
800000	XXX	1 L.S.	REMOVE AND DISPOSE OF EXISTING MATERIAL

WIRING DIAGRAM



PHASE CHART

	1	2	3	4	5	6	7	8	10	11	12	13	14	15
	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)	(G)
PHASE 2+6	G	G	G	G	R	R	R	R	DW	WK	DW	WK	WK	WK
2+6 CHANGE	G	G	Y	Y	R	R	R	R	DW	FL/DW	DW	FL/DW	FL/DW	FL/DW
PHASE 4+8	R	R	R	R	G	G	G	G	WK	DW	WK	DW	DW	WK
4+8 CHANGE	R	R	R	R	G	G	G	G	FL/DW	DW	FL/DW	DW	DW	DW
FLASHING OPERATION	FL	FL	FL	FL	FL	FL	FL	FL	DARK	DARK	DARK	DARK	DARK	DARK

EQUIPMENT LIST "C"

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CABINET. CABINET AND ALL OTHER MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

A, B	VIDEO DETECTOR CABLE	O, P	ELECTRICAL CABLE 7-CONDUCTOR (NO. 14 AWG)
C, D		Q, R	
E	ELECTRICAL CABLE 4-CONDUCTOR (NO. 20 AWG)	S, T	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
F, G, H, J	ELECTRICAL CABLE 5-CONDUCTOR (NO. 14 AWG)	U, V, W	ELECTRICAL CABLE 1-CONDUCTOR (NO. 4 AWG)
K, L, M, N			

ADDENDUM #2 10/11/2001



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET
MD 450 - MD 193 TO STONYBROOK DRIVE
MD 450 AT TRINITY/MOYLAN DRIVE - PHASE II

THE WILSON T. BALLARD CO.
CONSULTING ENGINEERS
OWINGS MILLS, MARYLAND

DRAWN BY:	STB	F.A.P. NO.	SEE TITLE SHEET	TS NO. A	SHEET NO.
CHECKED BY:	NONE	S.H.A. NO.	PG9005571	TS-672C-1PH2A	
SCALE:		COUNTY:	PRINCE GEORGE'S	T.I.M.S. NO.	
DATE:	OCTOBER 2001	LOG MILE:	11.95	D 538	426 OF 545